NOTES FROM 09.28.05 PROTON DRIVER MEETING - CIVIL

Attendees: Giorgio Apollinari, Rich Stanek, Dixon Bogert, Jerry Leibfritz, Kamran Vaziri, Mike Andrews, Mike May, Rod Walton, Lee Hammond, Gary VanZandbergen, Chuck Federowicz, John Santic, Ed Crumpley, Elaine McCluskey

ITEMS DISCUSSED:

1. **Review of typical RF station layout for vertical and horizontal from Jerry/Mike meetings:**
    a. Jerry summarized their discussions on 9/27 with Chris Jensen, Dan Wolff, and Al Moretti
    b. It's ok to position the 4.5 MHz modulator, charging power supply, and vertical klystron together linearly along the layout
    c. For horizontal version, don't stick this into the aisle. Since equipment can be pushed closer together, this shouldn't be a problem.
    d. Put 2 rows of racks on one side, and one row of racks on the other side of the transformer to support the klystron. People not willing to say what's in the racks for now (we're working off info from prior meetings this year)
    e. Width of gallery for moving things seems ok
    f. Still have no idea of what a horizontal klystron looks like or what the dimensions are
    g. Plan to take all klystrons to L-0 Building for servicing. Would plan to move both horizontal and vertical klystrons with the oil
    h. Question of whether oil has to be processed?
    i. Horizontal might be selected as prototype for ILC or FEL.
    j. Installation of equipment: will need to install as equipment is delivered, since there's not a staging building. Timing important
    k. Testing of equipment – what are infrastructure requirements that need to be in place to do this?
    l. Need separate meeting (planned for next working group on 10/12) with Wolff, Moretti, Jensen at minimum to discuss installation/testing/other issues. Elaine to invite

2. **3-D drawing of gallery:**
    a. Added trench – need to move cable tray to back side
    b. Air duct
    c. Waveguide Penetrations: L-shaped 18" pipe with deep manhole. Look at Linac Upgrade project for example
    d. Cable penetrations: may be better to do Z shape for construction and settlement reasons. Question of whether cables should come in top or side of tunnel. Likely to be up to 10 or 12 individual 6" conduits at each RF station instead of 2 larger penetrations containing numerous conduits

3. **540 Building areas:**
    a. Gary showed "flatter" layout, which has become our preferred layout. Provides better access, disrupts site less
    b. Site plan will be revised to show this

Actions:

- Bob Webber to look into cooling of waveguide penetrations
- Bob W to try to get information on optimum location of cable penetrations in each RF station
- Elaine will invite noted individuals to 10/12 meeting to discuss more about typical RF equipment

Next meeting scheduled for 10/12/05 at 9:30 in WH5NE